TRIAZINE IMMUNOASSAY (IA)

COMPLIANCE SAMPLING COLLECTION GUIDE

Kansas Public Water Supply Systems using the Kansas Health and Environmental Laboratories



Prepared by
Kansas Department of Health and Environment
Bureau of Water
Public Water Supply Section

TRIAZINE IMMUNOASSAY (IA) SAMPLING

Triazine immunoassay (IA) compliance samples are used to satisfy the requirement of Synthetic Organic Contaminant (SOC) monitoring for groundwater systems. SOCs are also known as pesticides.

SOC monitoring is part of the Phase II/V Rules. SOC monitoring requirements are stated in the Code of Federal Regulations 40 CFR 141.24, and can be found online at the Kansas Department of Health and Environment, Public Water Supply Section website http://www.kdheks.gov/pws/index.html.

The purpose of this document is to provide a quick guide for collecting triazine immunoassay samples. A Phase II/V Rules Survival Guide is available online at the KDHE, Public Water Supply Section website http://www.kdheks.gov/pws/index.html, and is a more extensive guide on all facets of the Phase II/V Rules.

On the result report for an IA sample, atrazine is reported. However, the analysis of the sample does not measure atrazine directly, but rather tests for the presence of chemicals from the triazine family which includes atrazine.

If an IA sample indicates a result of atrazine at a level >= 0.45 ug/L, a sample collection for a full SOC analysis, aka pesticide scan, will be required to determine what substances the IA sample was detecting. If required to collect a pesticide sample, please refer to the compliance sample collection guide titled <u>Synthetic Organic Contaminants (SOC) Samples a.k.a. Pesticide and Atrazine Sample</u> for information on pesticide scan sampling.

The Kansas Health and Environmental Laboratories (KHEL) is part of the Division of Environment under the Kansas Department of Health and Environment (KDHE).

The KHEL fee is \$25 for analyzing triazine immunoassay (IA) compliance samples.

What is in an IA Sample Kit from KHEL?

- Cooler shipping box
- One 20 cc clear glass bottle
- Ice packs
- Green return shipping label
- Sample collection procedure sheet
- Sample submission form

An IA sample kit and a volatile organic contaminant (VOC) sample kit are usually shipped from KHEL together in the same box. When this is the case, the following line will appear on the sample submission form under the heading Organic Analytical Tests Requested:

VF (bottle ID number) Volatile Organics – EPA method 524.2

If the sample kit received also contains a VOC sample kit, please refer to the compliance sample collection guide titled *Volatile Organic Chemicals (VOC) Samples* for information on VOC sampling.

Figure 1-IA is a picture of what is contained in an IA sample kit from KHEL. A barcode label on the sample collection bottle will have the system's KHEL account number and the bottle identification number. The green return shipping label is to be placed on the outside of the package when ready to ship the sample back to KHEL. The white sheet is the sample submission form that must be completed for each IA sample.

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2.	Fill each vial, those labeled A* 4. W, three quarters of the way with water from the "Point Of Entry for which can't will indeed. Using the frequency species provides and as the one of the 50% hybrideless (NC) made solution to the water indeed with 15% and and for most may 10 member does and solid point or elaborate. CAUTION: 59% hybridelesses in A Strong Arid, West Eye Francistus. Water Any Spelling Francistus and Arid (1984) of Tay Muster.	PWS MATER SAMPLE SUBMISSION FORM
	(NOTE: Discard used glass pipettes after rinsing with up water. Rinse out the acid from the 5 co acid vial with late of water and reseal the vial. Place the vial and rubber someon bulb back into the shirning container.)	Report To: LBM MOND, CS Address: PORMES FIRED, NOTLOINE 740 TOTHER MS 66530-0001
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	Name, Date & Time of sample collection. Vial Labeled 'LA' (20 or Vial for Triucines - One Collected Per POE)	
5.	Remove cap and fill the vial with water from the Point Of Entry' for which each vial is lubeled. Replace cap. Using a pen or marker with waterproof ink, label each vial with the following information:	May 12 2012 May 12 2013 May 12 2013 May 12 2012 May 12 2012 May 12 2013 May 12
	Sample Collectors Name, Date & Time of sample collection.	Signature 24 Nour
77.	Complete the 'Sample Collection Period' section of the PWS Sample Submission Form(s) by filling in the following: Sample Collector (signature), Collection Date(check) and Collection Time(24 boar).	ORGANIC ANALYTICAL TESTS REQUESTED
	Fine of an anyther in a refiguration and conscipled for a few for 12 boars) to cools complete to 33-60° F. After causely have been cooled does, judge contains in a fine supercise chain, the description depope. Aft the frame free-rescript to be sloper. Fine, gracking materials such as caregulat nodesquest, description, description, and the frame free-rescription for sloper. Fine, gracking materials such as caregulate nodesquest, description, de	IA 257018 Triezinas - Immunosassy Method
10.	Histophysis collection is a to the Ast. concident for Chairs of Chairshy section of the Stought Schröniston from (b) by printing the dates on the Touris Inst. of power concerns the Michaelank II by these of an eligible by the control on the Maccolin III by Energy (e.g., 70 bypect By USF). Singuing anomales in the Ast. the Transition Research and according that the Illustration of Chairs on the Energy Part of Chairs of the Michael Research Francis and the Northeston dates on the bid of the symbolium confer. Chairs and uniform of the dispers have with energying upon. Affine the energy highly hallow the bid of the deposits on the Michael Research and the Chair Chairs of the Special Special Chairs of the Chair Chair and the Special Chairs of the Chair of the Chair Chair and the Chair Chair and the Special Special Chair and the Special Chair and the Special Chair and the Chair Chair and the Special Chair and the Special Chair and the Special Chair and the Special Chair and the Chair and the Special Chair and the Special Chair and the Special Chair and the Special Chair and the Special Chair and the Special Chair and the Special	
(16.	If delivering samples directly to the lab, complete the Chain of Castedy section when reliaquishing samples to anyone involved in the transportation and have them do the same. Also sign the form when reliaquishing samples to lab staff.	Sampling Comments:
720	Laboratory Hours for receiving samples are from 8:00 AM to 5:00 PM, Monday thru Friday.	Chain of Custody:
12.	BO NOT SHIP samples are later than Wednesday or the samples may sir in the lab over the weskend for soore than the 24 hours that the theore-pack will keep the samples odd. Should this occur, recollection of the samples will be required.	Date Relinquished By Received By
	SOTE: For industrial regarding those collection poseedures, contact: Lab Director, Environmental Chemistry Laboratory, Divisios of Health & Directors and Laboratories. Plant: 785-396-1467 For schooling problems contact: 1975 Societa, Bernard Water. Phone: 785-396-336.	Date Reliquished By Beceived By Date Reliquished By Received By
	Page 2 of 2	
	Depart By John State	PLA DESCRIPTION FORM ASSESSMENT TO THE STATE OF THE STAT

Figure 1-IA. What Is Included In an IA Sample Kit

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PW	S WATER SAMPLE SUBMISSION FORM
eport To: LEE BOND, CS	Address: FORBES FIELD, BUILDING 740 TOPEKA KS 66620-0001
WS Account Number: Z8400	Name: KDHE/DHEL LABORATORIES
OE Site Identification Number:	: 00000001 POE Location:
	SAMPLE COLLECTION PERIOD (Check Date Collected) Spl Receipt Temperature LAB USE ONL
Mar 11 2012	Mar 12 2012 Mar 13 2012
Sample Collector:Sign	Sample Collection Time: : 24 Hour
ORGAN	NIC ANALYTICAL TESTS REQUESTED
IA 257010 Triazines -	Immunoassay Method
ampling Comments:	
Chain of Custody:	
Date Relinquished By_	Received By
	Received By
Pate Relinquished By_	
	Received By

Figure 2-IA. Example of an IA Sample Submission Form

THE IA SAMPLE SUBMISSION FORM IN DETAIL

Figure 3-IA indicates the header of the form which indicates where the kit came from, and that the form is for use in submitting a public water supply sample. The address in the header is the address of KHEL and will match the address on the green return shipping label that came with the sample kit.

ENVIRONMENTAL CHEMISTRY LABORATORY
KANSAS HEALTH AND ENVIRONMENTAL LABORATORIES
KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
FORBES FIELD, BUILDING 740
TOPEKA, KANSAS 66620-0001

FWS WATER SAMPLE SUBMISSION FORM

Figure 3-IA. Header of the Sample Submission Form

Figure 4-IA indicates the system's address information printed on the form.



Figure 4-IA. System Address on the Sample Submission Form

Figure 5-IA has been highlighted to point out specific areas on the form.

The part highlighted in green indicates the system's KHEL account number.

The part highlighted in purple is the point-of-entry (POE) identification number where the sample must be collected. The POE Site ID number should match a KDHE identification tag number that is physically at the site where the sample should be collected.

The part highlighted in yellow has often caused confusion for samplers. It is the Local Name for the collection site. In our data base, systems have the option of giving the POE site a "Local Name," and printed on the form in this location (if anything) is whatever the system requested as the Local Name.



Figure 5-IA. System KHEL Account Number and Collection Site ID on the Sample Submission Form

Figure 6-IA indicates the section that must be filled out for each IA sample. Fill out the form completely and neatly! If there is a problem with the sample, KHEL personnel will call the sample collector and try to resolve it. However, if they are unable to make contact the sample may be rejected and the system will have to re-collect the sample.

Figure 6-IA indicates that the form presents the choice of three different dates for sample collection. Check the correct box for the date the sample is collected. If unable to collect on one of the three dates printed on the form, call the KDHE Public Water Supply Section at 785-368-8336 to see if it's possible for the scheduled collection dates to be changed. The gray highlighted area is where the sample collector should write their name.



Figure 6-IA. Three Different Choices for Sample Collection Dates On the Sample Submission Form

Figure 7-IA has added highlighting. This part of the form lists the bottle ID number and the method that will be used to analyze the sample.

The part highlighted in blue is the identification number of the bottle. The bottle ID number on the container should match the bottle ID number on the sample submission form. If they don't match, call KHEL at 785-296-1620 and notify them of the situation.

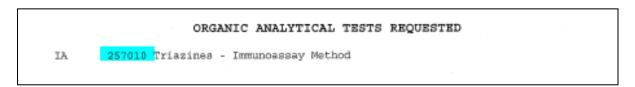


Figure 7-IA. Analysis Method and Bottle ID on the Sample Submission Form

Figure 8-IA indicates that the form has space for sample collection notes. If the sample collector has any comments about the sample that they feel is important for the analysts at KHEL to know, they should write comments on the line labeled, "Sampling Comments." The "Chain of Custody" lines only need to be used if the sample is passing from the sample collector to someone other than the courier service that will be delivering the sample to KHEL.

Sampling Comments: Chain of Custody:			
Date	_ Relinquished By	Received By	
Date	Relinquished By	Received By	
Date	_ Relinquished By	Received By	

Figure 8-IA. Chain of Custody Section on the Sample Submission Form

COLLECTING AND SHIPPING THE IA SAMPLE

IA samples must be chilled before shipping. Before collecting an IA sample, put the ice packs in the freezer. After collecting the IA sample, immediately place the bottle in the refrigerator to chill overnight. Make sure the sample does not freeze or the bottle will break.

The sample kit instructions will state that the samples must be collected on one of three dates that fall on a Sunday, Monday or Tuesday. The collected samples must reach KHEL no later than Wednesday the same week with only 24 hours in transit. Many systems pay for additional courier services (next day or priority shipping) to ensure their sample will be delivered on time. If unable to collect on one of the dates printed on the sample submission form, call KDHE, Bureau of Water, Public Water Supply Section at 785-368-8336 to see if it's possible for the scheduled collection dates to be changed.

Collecting the IA Sample

Read through the sample collection instructions before collecting. For questions or concerns about the sample collection process, call KHEL at 785-296-1620 for assistance.

IA compliance monitoring samples are collected from finished water. Listed on the sample submission form is the POE site ID number from where the sample needs to be collected. At the site where the sample should be collected, there should be a KDHE ID tag with a number that matches the POE Site ID number on the form.

Shipping the IA sample

Place the sample and the freezer packs into the cooler in the shipping box. Place the completed sample submission form on top of the cooler lid. Tape the box shut. Secure the green return shipping label to the package. The sample must arrive at KHEL by Wednesday with only 24

hours in transit. Many systems pay for additional courier service (next day or priority shipping) to ensure their sample will be delivered on time.

If the sample container leaks it could arrive at KHEL empty or with not enough sample left to analyze. Many couriers will consider a wet package undeliverable and will discard it. Either of these scenarios would require the system to re-collect the sample.

SUMMARY OF IA SAMPLING

- Upon receipt of the sample kit, open and review the appointed sample collection date.
- Check that bottle ID numbers, KHEL account number, and collection site ID numbers are correct.
- Place the ice packs in the freezer.
- Follow the sample collection instructions included with the sample kit.
- Fill out the sample submission form neatly and completely.
- Immediately after collecting the sample, place it in the refrigerator to chill overnight.
- Include the ice packs and the sample submission form in the package with the sample.
- Paying for additional courier services (overnight or priority shipping) may be necessary to ensure the sample is delivered to KHEL on time.
- Calling KDHE with questions or concerns you may have is highly encouraged.

For questions about your IA sample kit or the sample collection process, call KHEL at 785-296-1620.

For questions about your IA compliance or compliance monitoring schedule, call KDHE's Bureau of Water, Public Water Supply Section at 785-368-8336.